

(c) hybridizes under highly stringent conditions to the nucleotide molecule of (a) and encodes a naturally occurring PTP05 or PTP10 polypeptide

wherein said highly stringent conditions are at least as stringent as 50% formamide, 5 x SSC (0.75 M NaCl, 0.075 M Sodium pyrophosphate, 5 x Denhardt's solution, sonicated salmon sperm DNA (50 g/mL), 0.1% SDS, and 10% dextran sulfate at 42 °C, with washes at 42 °C in 0.2 x SSC and 0.1% SDS;

(d) encodes a PTP05 or PTP10 polypeptide having the full length amino acid sequence of the sequence set forth in SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8, except that it lacks one or more of the following segments of amino acid residues: 1-187, 188-420, 421-426 of SEQ ID NO:5, 44-80, 225-457, 458-463 of SEQ ID NO:6, or 1-87, 188-405, 406-412 of SEQ ID NO:7;

(e) is the complement of the nucleotide sequence of (d);

(f) encodes a polypeptide having the amino acid sequence set forth in SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8 from amino acid residues 1-187, 188-420, 421-426 of SEQ ID NO:5, 44-80, 225-457, 458-463 of SEQ ID NO:6, or 1-87, 188-405, 406-412 of SEQ ID NO:7;

(g) is the complement of the nucleotide sequence of (f);

(h) encodes a polypeptide having the full length amino acid sequence set forth in SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8, except that it lacks one or more of the domains selected from the group consisting of a N-terminal domain, a catalytic domain, and a C-terminal domain; or

(i) is the complement of the nucleotide sequence of (h)].

In both claims 3 and 5, line 1, please change "1" to --2--.

9. (AMENDED) A recombinant cell comprising a nucleic acid molecule encoding either

[(a) an] the PTP05 or [a] PTP10 polypeptide according to any one of Claim 2, Claim 23 or Claim 24;

(b) a PTP05 or a PTP10 domain polypeptide; or

AS (c) a PTP05 or a PTP10 polypeptide] or PTP05 or PTP10 [domain] polypeptide  
according to Claim 2, Claim 23 or Claim 24 fused to a [non-PTP04] non-PTP05 or non-PTP10  
polypeptide,

wherein said nucleic acid molecule is inserted into said cell.

Please add the following claims:

--23. (NEW) An isolated, enriched or purified nucleic acid molecule comprising  
a nucleotide sequence that

(a) encodes a polypeptide having an amino acid sequence that differs from the  
sequence set forth in SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8 by that it  
lacks one or more, but not all, of the following segments of amino acid residues: 1-187, 188-420,  
421-426 of SEQ ID NO:5, 44-80, 225-457, 458-463 of SEQ ID NO:6, or 1-87, 188-405, 406-412  
of SEQ ID NO:7, respectively;

(b) is the complement of the nucleotide sequence of (a);

AB (c) encodes a polypeptide having the amino acid sequence set forth in SEQ ID NO:5,  
SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8 from amino acid residues 1-187, 188-420, 421-  
426 of SEQ ID NO:5, 44-80, 225-457, 458-463 of SEQ ID NO:6, or 1-87, 188-405, 406-412 of  
SEQ ID NO:7, respectively; or

(d) is the complement of the nucleotide sequence of (c).

24. (NEW) An isolated, enriched or purified nucleic acid molecule comprising  
a nucleotide sequence that

(a) encodes a polypeptide having an amino acid sequence that differs from the amino  
acid sequence set forth in SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8 by  
lacking at least one, but not more than two, of the domains selected from the group consisting of  
a N-terminal domain, a catalytic domain, and a C-terminal domain; or

(b) is the complement of the nucleotide sequence of (a).

25. (NEW) The nucleic acid molecule of any one of Claim 2, Claim 23 or  
Claim 24, further comprising a nucleotide sequence that encodes a non-PTP05 or a non-PTP10  
polypeptide, wherein said non-PTP05 or non-PTP10 polypeptide is fused to a polypeptide

molecule whose amino acid sequence is set forth in SEQ ID NO:5, SEQ ID NO:6, SEQ ID NO:7, or SEQ ID NO:8.

26. (NEW) The nucleic acid molecule of any one of Claim 2, Claim 23 or Claim 24, wherein said nucleic acid molecule encodes a GST-fusion protein.

27. (NEW) An isolated, enriched or purified nucleic acid molecule comprising a nucleotide sequence set forth in SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, or SEQ ID NO:4.

28. (NEW) The nucleic acid molecule of any one of Claim 2, Claim 23 or Claim 24, further comprising restriction endonuclease recognition sites at the 5' end and/or 3' end, so that the nucleic acid molecule is manipulable to contain functional alterations of the nucleic acid sequence that afford an opportunity to promote secretion and/or processing of heterologous proteins encoded therefrom.

29. (NEW) The nucleic acid molecule of Claim 5, wherein said vector is selected from the group consisting of pBR322, pUC118, pUC119, ColE1, pSC101, pACYC 184, pVX, pC194, pC221, pT127, p1J101, BPV, vaccinia, SV40, 2-micron circle,  $\lambda$ gt10,  $\lambda$ gt11, fC31, pMAM-neo and pKRC.

30. (NEW) The nucleic acid molecule of Claim 5, wherein said promoter is selected from the group consisting of the int promoter of bacteriophage  $\lambda$ , the bla promoter of the  $\beta$ -lactamase gene sequence of pBR322, the CAT promoter of the chloramphenicol acetyl transferase gene sequence of pBR325, the major right or left promoters of bacteriophage  $\lambda$ , the trp, recA, lacZ, lacI or gal promoters of E. coli and the  $\alpha$ -amylase or sigma-28 specific promoters of B. subtilis.

31. (NEW) The nucleic acid molecule of Claim 5, wherein said host cell is a yeast cell, a fungi cell, an insect cell, a plant cell or a mammalian cell, wherein said mammalian cell either *in vivo* or in tissue culture.